



A Brief Review on Dementia

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Dementia is a cognition decline that interferes with daily life functions. It is a syndrome cause of dementia is neurological and some medical conditions. Sometimes other diseases can contribute to dementia. Dementias of the neurodegenerative kind are common in adults, while injury to brain and brain tumors are common in students. In recent years, there have been advancements in neuroimaging and the correlation of clinics with pathology, and in the development of biomarkers, doctors still await modifying therapies for neurodegenerative dichasia.

There have been only a few articles on dementia within the IJP.

Most of the patients found are above the age of 60. Therefore, community-based interventions for the management of diseases like dementia are essential. The effectiveness of those resolves must be acknowledged. Also, the danger factors for dementia should be identified.

It is statically proved that folks will suffer from dementia more within the near future. Thus research during this field is significant for developing service and training. This paper aims to review research published on dementia in people above 40 years.

The cases of dementia increase with the increase in age of the person. Dementia makes people more and more dependent on others. Dementia is increasing challenges to our society and healthcare system. Clinical and pathological criteria for the significant dementia-causing diseases overlap significantly. The emergence of symptoms decades into the pathophysiological process

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hamper targeted disease therapy. A significant number of research initiatives are underway to identify potential biomarkers of disease processes earlier. The association of both overt cognitive decline and underlying pathophysiological processes with normal aging complicates identifying disease processes early within the spectrum of normal aging.

Once the diagnosis is established, prognostic measures are required and are still lacking, as disease trajectories between individuals can vary greatly. Globally, governments recognize these challenges. Investment and research infrastructure are beginning to reflect the scale of the need. Drugs conferring symptomatic benefit are available, and memory service structures exist to diagnose dementias and guide management. The personal impact of dementia on patients and families is also increasingly recognized, with discussion in the media surrounding famous sufferers and dramatizations in literature and film. Herein we attempt to describe the current landscape of dementia.

Keywords: Dementia; cognitive impairment; depression; anxiety.

1. INTRODUCTION

1.1 Background

Dementia cannot be classified as a disease. It is a group of symptoms that affects are thinking, memory, reasoning, personality, mood. It develops when the qualities above related to the brain are damaged. The most typical cause of this disease is Alzheimer's. Dementia is not a common problem that is related to aging. Just the loss of memory is not an indication of dementia. Dementia is often labeled a late-life disease as people who get it are mainly above the age of 65 [1].

1.2 Types of Dementia

Dementia is generally of two types-Alzheimer's and non-Alzheimer's

Dementia of the former type is signified by memory loss, problem in language functioning called aphasia, dysfunction of muscles related to speech, and problems in identifying objects [1].

Latter includes frontotemporal lobar degenerations, which are divided into two types. One type mostly affects speech, while the other affects behavior, including no feeling, emotion, interest, concern (apathy), and loss of ability to plan. Causes

- Diseases such as Alzheimer's disease, frontotemporal lobar dementia, dementia with Lewy bodies, Parkinson's disease dementia, and Huntington's disease [1].
- Multiple strokes in the brain
- Infection affecting CNS
- Chronic Alcohol consumption and drug abuse

- Depression
- Brain tumors

In 50-70% of cases, the cause is Alzheimer's. 1Patients in whom many different brain condition causes dementia are said to have mixed dementia.

Dementia is a progressive or chronic syndrome that leads to the destruction of cognitive functioning's.1It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement.1Dementia is preceded by mood changes control in emotions, behavior, or motivation.

1.3 Signs and Symptoms

These can be in three stages.

Early-stage: this is often ignored since the appearance of symptoms is very slow.

- forgetfulness
- Not knowing the track of time
- Getting lost frequently

Middle stage:

Here the symptoms become clearer

- Forgetting people's name
- Visible confusion
- Communication difficulty
- Assistance in personal care
- * Repeating the same question

Late-stage: here, the persons become entirely dependent on the caregiver. Memory is seriously damaged [1].

- Problem in recognizing relatives and friends
- Self-care lost
- Problem in walking
- Loss of track of time How is dementia diagnosed?

Confirming this is had as many diseases cause it, and its symptoms are very similar to many diseases. Doctors make a diagnosis based on the medical history, present symptoms, brain and cognitive tests, laboratory tests, CT scans, MRI scans, and by interaction with patients [1].

By definition, the symptoms that indicate dementia are a detour in memory, thinking, reasoning, personality, a mood that can interfere with daily working. Patients undergo tests to find out those above. Talking to family members about these symptoms is helpful. Other diseases are taken out of considerations by laboratory tests. CT, MRI look for the causes of dementia-like stroke or tumor. Dementia-associated psychosis is becoming increasingly common [2]. People with dementia experiences agitations and symptoms such as delusions.

Through this article pharmacological basis of treatment of dementia is being searched. There is a limitation on second-line treatments. Additional randomized control trials are the hour's need to guide clinical decision-making for dementia [2].

Dementia can not be prevented. But I am living a healthy life can decrease certain risk factors which cause dementia. Low cholesterol, normal BP, regular blood sugar, and normal BMI are as healthy as possible. There is no smoking, a proper diet including whole grains, fruits, vegetables, nuts, beans, and little red meat—at least 30 mins of exercise. Solve puzzles, word games, etc. to keep the brain engaged. Interact with people [3].

Many articles were assessed for dementia in IP by watching abstract or full text. Few selected articles were reviewed, and findings were summarized. Some other disorders of cognition were considered along with dementia. The following results were found.

Thirteen articles describe the rationale for mortality in late life. Ask Table for a summary of those studies. The diagnostic criteria varied across these studies. The most expected psychiatric morbidity was depression [4]. Many

studies checked out psychosocial factors related to depression in late life. Reasons like gender, widow, small family, and life event deemed extremely stressful were a number of the explanations for late-life depression. The authors felt that the symptoms of late-life depression were very hard to identify compared to depression of earlier ages.

The author studied fifteen cases of paraphrenia [5]. These included some cases with hallucinations and without delusion after the age of 60. Hallucinatory experiences were found in most cases. Most patients had disorders related to the eye and ear. Ten patients had hearing disorders [6].

This article highlights the role of tradition and culture.

Five articles were published about issues related to late mental life. It refers to challenges related to adulting in a rapidly changing world [7]. The challenges that millennials face today are more severe because of the increase in living pace and advances in science. It acknowledged the urgent need for developing social support and necessary services. Public awareness about the state of mental health of people over the age of 60 needs to be spread [8].

Dementia has become a topic of concern for people above the age of 40 years. It is specified by the decline of, to the very least, two brain functions, for example, loss of memory and impairment in judgment; dementia cannot be called a particular disease. It is a group of diseases that affects the ability to make decisions. Nine-nine factors can increase the risk of dementia, such as genetics, age, diet, and lifestyle. Since the genetic factor and age cannot be changed, we can control our lifestyle and diet.

It is assumed that we have to eat healthy food for being healthy. In reality, it is equally essential for your mental well-being [9]. Studies have shown that a large intake of junk food and food low in nutrients increases the chances of getting anxiety, stress, and depression. This can thus increase the risk of dementia.

Research has shown that food rich in refined carbs also increases the risk of dementia. Refined carb increases the glucose level in the body. Studies have shown that the frequent increase and decrease in the blood sugar level by refined carbs can lead to dementia [5].

A new york journal has proved that people with a high level of sugar, no matter if they have diabetes or not, have greater chances of getting dementia. Too much sugar in your body can increase the chances of dementia [10].

You are eating meals in. So, you need to cut down on products made from refined flour like bread, pasta, pizza, cookies. Swap them with food made with whole and fiber-rich grains. Along with that, add more veggies, fruits, and legumes to your plate [11].

Refined flour is just one food product that can impair your brain health; several other items are equally harmful. Eating these food items in excess can increase the risk of dementia, mood swings, depression, and anxiety. Here are some other foods you need to cut down from your diet.

Red meat less than four times a week Fried or fast food less than once a week

One serving of cheese a week

Five pastries or sweets a week

One serving of alcoholic drink a day

Dementia refers to a group of symptoms ranging from memory loss, flawed thinking and problem-solving abilities that usually affect people in old age. Dementia is a general disease. That said, it can be caused by other illnesses. It is not a specific or single disease, instead, it consists of many other medical conditions. Alzheimer's is the most common cause of progressive dementia [12].

As of now, there is no natural cure for dementia. However, the scientific finding suggests it can be detected early. This helps us be aware of the possible condition and pushes us to strengthen our brain health and defenses.

When it comes to dementia, it is impossible to tell who is more prone to the illness. However, a study involving over 2,000 people showed that memory and thinking tests could reveal differences in people who develop Alzheimer's disease up to 18 years before diagnosis [13].

As per the test that was completed 13 to 18 years before the study ended, it was found that a lower score in cognitive tests was linked to an 85 percent higher risk of possible dementia. This also indicates that the development of

Alzheimer's disease may start many years before diagnosis.

There can be different variations of dementia symptoms. Some can be def by the cognitive changes, while the psychological changes determine others [14].

Symptoms associated with cognitive changes are:

- Loss of memory
- Difficulty finding words or completing a sentence
- Inability to solve problems
- Difficulty with coordination
- Confusion

While being old makes you more prone to Alzheimer's disease, experts claim that regular exercise, healthy eating, and staying happy can reduce the risks.

Working out regularly and keeping yourself fit makes you less prone to dementia and keeps stress and anxiety at bay. This, in turn, reduces the risk of heart ailments and other chronic illnesses.

According to the Alzheimer's Society (AS), "Even 10 minutes at a time is good for you, and try to avoid sitting down for too long."

As per a study, general mundane activities like cleaning and gardening can lower the risk of dementia and even make it manageable if performed regularly. Engaging in certain household chores helps to create greater brain volume. Surprisingly, those who performed household chores had greater brain volume than those who performed any kind of strenuous physical exercise. The study published in the journal Neurology specifically mentioned five household chores that can benefit those suffering from_dementia [11].

2. CASES OF DEMENTIA

Cleaning and your mental health have a strong link. Decluttering the home and space around you can help to reduce stress, anxiety, and depressive symptoms. Cleaning is meditative, which helps release endorphins in the brain, altering the perception of pain and triggering a positive feeling. It also helps to improve concentration and lift your mood, a common area of concern in the case of dementia [15].

Studies suggest that keeping your space messed up can make the symptoms of depression worse. Besides, it leads to decreased focus, confusion, and tension. Keeping your surroundings arranged can provide a sense of self-control over the environment and ease the stress level. For people suffering from dementia, decluttering can help to concentrate and decreases the episodes of mood swing.

Cooking is not only a random household task. It is a brain-stimulating activity, which helps to keep your brain healthy. This activity strengthens the frontal lobes of the brain and improves all sorts of functions related to it. Getting to know herbs and spices can improve sensory acuity and memory. Most important of all paying attention to the recipe helps to improve attention and optimize brain functioning.

Doctors should be able to detect such cases of mental illness older people. More importantly services provided by the community needs to be developed. There have been no discussions on cases of psychiatric morbidity. Studies on needs of the one giving the care, the cost and burden of care needs to be performed [8].

We cannot reflect on the success made within the field of dementia research. In many cases there have been research in India but the results were published in journals elsewhere. These studies are important because they form the evidence for WHO fundings in middle and low income countries for dementia.

Studies have shown that more often than not the person seeking help is older i.e above the age of 60 years. The common reason being depression which was than associated with numerous other physical illness. Thus more information on depression is required by conducting a study on large samples. Depression is mostly related to financial problems, a head injury or history of cardiac complications in the family. Having more people to confide in was a big protective sheet over it. Some biological or some pathological factors contribute to depression over the age of 60. It is possible to control this. Goods and services for older people facing mental health problems still remains a public challenge. It is a tough task to develop services where resources are limited. Management lately life mental problem are going to be incomplete without caregiver support. Management of those are often very stressful for the families. In underdeveloped and developed countries

dementia packages have been proposed. A trained primary healthcare team can provide the specified care. For elderly and disabled the support of community is very important. A long term political promise is required for it implement.

Dementia is a progressive decline go cognition. It is cortical in etiology. The study was not staked In Alzheimer's it is mostly related to aphasia and apraxia. Subcortical dementia include conditions like Parkinson's and Huntington's .In the population eras, dementia is becoming a real burden. Behavioral problems and psychosis related to dementia are becoming common explanation for death in the patient. These behavioral disturbances hourly include aggression, agitation, wandering, verbal aggression, hostility, irascibility, and psychosis. Much 70 of people with lunacy will see agitation, and 75 will see symptoms of psychosis like fancies or dreams A specific pharmacological treatment for dementia has not been found. These things can be a gruesome burden to the family members [7].

The aim here is to find specific pharmacological treatments for behavioral problems. Of course the non-chemical alternatives should be tried first and they can be beneficial. Pharmacology should only be considered when the first line of defense isn't working. FDA, as of now, hasn't approved any drugs for treatment of psychosis associated with dementia. Thus the aim here is to give a variety of options of treatment and the pros and cons of these treatments for dementia [4].

Here are some possible treatments for psychosis and behavioral problems related with dementia. Doctors should closely watch all these cases for side effects, and should limit the use of those drugs with more side effects. For cases with extreme behavioral problems clinician should limit the harmful one to shorter terms [5].

SGAs are used over FGAs because they have minimum side effects and are more motor related. There still is the doubt on its effectiveness and safety on a population. Still there's doubt if there negative outweighs its positives. Many experiments have proved that SGAs causes stroke, cardiovascular difficulties and ultimately death [16]. As a result of these coms with an FDA approved black box warning of death. As a result, all of the SGAs are associated with an FDA issued black box warning of increased mortality. Yet on other

sides some experiments supports the safety of SGAs.

FGAs are used illegally to treat agitation and psychosis. Studies recently shows that FGAs have increased the rate of mortality. A study pioneered that haloperidol caused 1.5 times more death than SGAs.

GABA

Gabapentin is an anticonvulsant, it is a possible treatment for behavioural difficulties in dementia.

This was based on the fact that GABA decreased aggression

Antidepressants-They are used because it was found out that serotonin deficiency leads to disturbed circadian rhythm, depression and increase in aggressive behaviour. Patients with dementia often show visible confusion, anxiety, behavioural outbursts, thus the use of antidepressants [17-20].

Analgesics- There is not much proof that the use of these improves behaviour. The theory being that untreated pain leads to irritation and ageing of course is related with painful conditions like arthritis. Participants taking acetaminophen were better at personal care [21-26].

3. CONCLUSIONS

The psychosis and behavioral changes related with dementia leads to decrease in quality of life, increase in death and more use of resources of national health department. Firstly what needs to be done is a plan that heeds to needs of patient and caregiver. We can also modify surrounding factors that may cause disturbances in the skills of caregivers. Pharmacological methods are controversial as they have limited data supporting them and risks. Medicines can be used if first line of defense has failed, or when symptoms are uncontrollable or the patient becomes a potential threat to society.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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